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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/425,234 10/25/99 RABIE H 4320-91

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EXAMINER

POPOVICS, R

ART UNIT	PAPER NUMBER
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1723

DATE MAILED:

09/07/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/425,234

Applicant(s)

Rabic et al.

Examiner

Popovics

Group Art Unit

1723

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

Period of Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Status

- ☒ Responsive to communication(s) filed on 6/30/00
- ☐ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- ☒ Claim(s) 1-26 is/are pending in the application.
- Of the above claim(s) 19-26 is/are withdrawn from consideration.
- ☐ Claim(s) _____ is/are allowed.
- ☒ Claim(s) 1-18 is/are rejected.
- ☐ Claim(s) _____ is/are objected to.
- ☐ Claim(s) _____ are subject to restriction or election requirement.

Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119 (a)-(d)

- ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- ☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been received.
- ☐ received in Application No. (Series Code/Serial Number) _____.
- ☐ received in this national stage application from the International Bureau (PCT Rule 1.7.2(a)).

*Certified copies not received: _____

Attachment(s)

- ☒ Information Disclosure Statement(s), PTO-1449, Paper No(s) 4
- ☒ Notice of Reference(s) Cited, PTO-892
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Interview Summary, PTO-413
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Other _____

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DETAILED ACTION

Election/Restriction

1. Applicants' election without traverse of Species I in Paper No. Six is acknowledged. Applicants have identified claims 1-18 as reading on the elected species.

Information Disclosure Statement

2. The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609 A(1) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.
3. It is noted that Applicants have characterized their IDS of February 17, 2000 (Paper No. 4) as a "Supplemental" one, however, no prior IDS appears to be in the file. It is further noted that the IDS box on Applicant's transmittal form was not checked.

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Double Patenting

4. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

5. Claims 1-18 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-14 of copending Application No. 09/425,235 optionally in view of AAPA (Applicant's Admitted Prior Art) and/or the Class 210, subclass 412 definition. Claim 12 of the '235 application essentially differs from claim 1 of the '234 application by specifying the additional steps of draining and refilling. It is well settled that elimination of limitations and their corresponding functions/effects are obvious, and thus, minimally, claim 12 of '235 is obvious over claim 1 of '234. The balance of the claims are obvious in view of AAPA and/or the Class 210, subclass 412 definition for the reasons advanced below.

This is a provisional obviousness-type double patenting rejection.

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Claim Rejections - 35 USC § 112

6. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

7. Claims 1-18 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for some range of values of duration and concentration, does not reasonably provide enablement for all possible values encompassed by the presently claimed concentration•duration product. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to practice the invention commensurate in scope with these claims. Absent the specification of upper and lower limits of both duration and concentration, the claims are not considered to be enabled for the product range now specified.

8. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. Claims 1-18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 1-18, it is unclear what Applicants intend the phrase “*cleaning event*” to mean.

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In claims 1-18, it is unclear what Applicants intend the relative and subjective terms “*rich*” and “*lean*” in the context used.

In claim 18, it is unclear what Applicants intend by the recitation “*is wasted.*”

Claim Rejections - 35 USC § 102

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

11. Claim 18 is rejected under 35 U.S.C. 102(b) as being clearly anticipated by AAPA (Applicant’s Admitted Prior Art).

Claim Rejections - 35 USC § 103

12. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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13. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over AAPA (Applicant's Admitted Prior Art).

AAPA discloses that it is known in the art to stop permeation, then backwash a membrane with a cleaning solution (see page 3, lines 11-14 of Applicants' specification) and resume permeation. Claim 1 essentially differs from AAPA by specifying a range of a product of the concentration cleaning solution and the duration of the "cleaning events." It would have been obvious to one having ordinary skill in the art at the time the invention was made to routinely optimize the process/apparatus of AAPA by determining effective cleaning concentrations and cleaning times, in order to enhance the backwashing process. It is submitted that the balance of the limitations are obvious, either representing routine optimizations, or obvious in view of that which is conventionally known in the art.

14. Claims 5-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over AAPA (Applicant's Admitted Prior Art) in view of Class 210, subclass 412 definition.

AAPA discloses that it is known in the art to first drain, and then backwash a membrane with a cleaning solution (see page 3, lines 4-15 of Applicants' specification). Claim 5 essentially differs from AAPA by specifying the "pulsing" of the cleaning solution. The use of pulsing to aid in the backwashing of filters is notoriously well known in the filtration art.

CLASS 210 Subclass Definition 412 :

Apparatus under subclass 411 having means to cause a backwash liquid, usually filtrate, to traverse the filter medium as a pressure wave, i.e., having pressures varying between two or more peaks, e.g., pistons reciprocating within a cylindrical filter medium or an intermittently actuated pulsator.


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In view of this disclosure, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the process/apparatus of AAPA by incorporating a pulsing step as is notoriously well known in the art, in order to enhance the backwashing process. It is submitted that the balance of the limitations are obvious, either representing routine optimizations, or obvious in view of that which is conventionally known in the art.

Conclusion

15. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Examiner Robert Popovics whose telephone number is (703) 308-0684, and who can normally be reached at this number from 9:30 A.M. through 6:00 P.M. (EST) M-F.

In the event that Examiner Popovics cannot be reached, Applicant may contact his supervisor, W. L. Walker, Supervisory Patent Examiner, at (703) 308-0457.

A handwritten signature in black ink, appearing to read 'R. Popovics', enclosed within a large, loopy circular flourish.

Robert James Popovics
Primary Examiner
Art Unit 1723

rjp
September 5, 2000